

# **Remedial Action Implementation Update**

**Remedial Action for IR Sites 07 and 18 at Parcel B;  
Soil Hotspot Locations at Parcels B, D-1, and G;  
and Soil Stockpiles at Parcels D-1 and G**

**HPS BCT Meeting  
January 27, 2011**



# Presentation Outline



- Update on RA activities in progress
  - IR Sites 07 and 18 Soil Cover
  - Parcels B, D-1, and G Soil Hotspot Remediation
  - Parcels D-1 and G Soil Stockpile Removal
- RA Completion Schedule
- RA Implementation Photos



## RA Activities In Progress



### IR Sites 07 and 18 Soil Cover

- Performed pre-cover land survey of entire 7/18 surface
- Mobilized soil offloading barge and began cover soil import at a rate of 3,600 tons per day
- Began transport of soil from barge offloading area using local trucking service (5 trucks looping for 8 hours per day)
- Began placing and compacting first soil lift
- Halted soil cover construction due to heavy rains in December (degraded roads, ponded water across base, inability to meet moisture content specifications for compaction)
- Will resume construction in mid-April at the start of the dry season





## RA Activities In Progress (cont.)

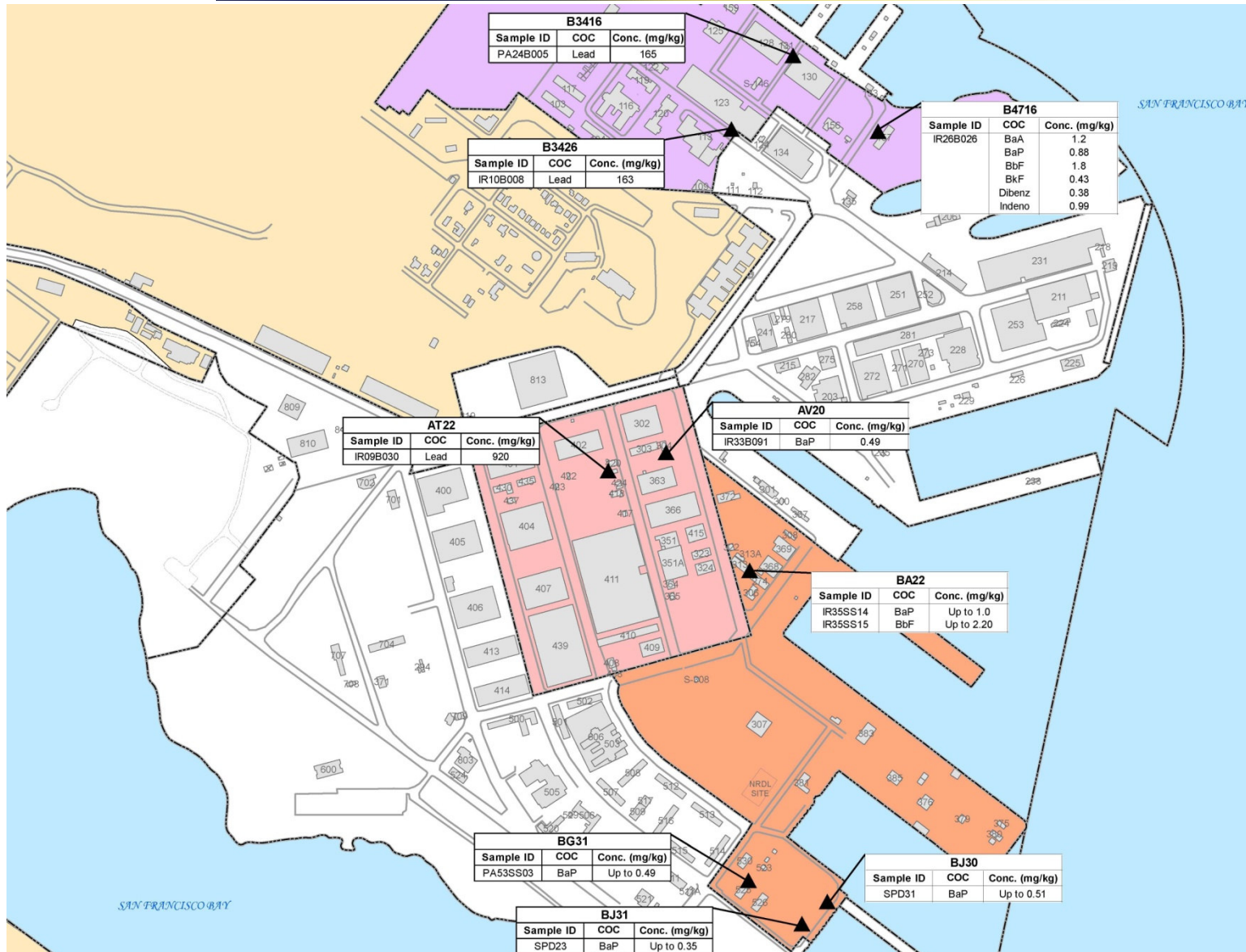


### Parcels B, D-1, and G Soil Hotspot Remediation

- Completed pre-excavation characterization sampling to delineate 9 of 11 hot spots; 2 hot spots not accessible in Parcel D-1
- All 9 hot spots excavated based on pre-excavation sampling results
- Sidewall and bottom confirmation sampling performed
- 2 of 9 hot spots required step-out excavation in one direction (B4716 and B3426)
- Additional confirmation samples collected at these 2 locations to verify complete removal of hotspot material
- Excavation B3426 required at least one additional step-out excavation – removal is ongoing
- All hot spots except B3426 were backfilled



# Soil Hot Spot Location Map



## Legend

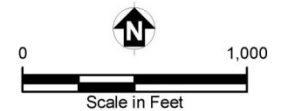
- ▲ Hotspot Location
- Parcel B
- Parcel D-1
- Parcel G
- Other Parcel Boundary
- 418 Building
- Demolished Building
- Road
- Non-Navy Property

## Notes:

Cleanup goals for hot spot chemicals of concern are as follows:

Expanded name	Remediation Goal, mg/kg
benzo(a)anthracene	0.37
benzo(a)pyrene	0.33
benzo(b)fluoranthene	0.34
benzo(k)fluoranthene	0.34
dibenz(a,h)anthracene	0.33
indeno(1,2,3-cd)pyrene	0.35
lead	155

COC = chemical of concern  
conc. = concentration detected in soil  
mg = milligram  
kg = kilogram  
BaA = benzo(a)anthracene  
BaP = benzo(a)pyrene  
BbF = benzo(b)fluoranthene  
BkF = benzo(k)fluoranthene  
Dibenz = dibenz(a,h)anthracene  
Indeno = indeno(1,2,3-cd)pyrene



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FIGURE 1

LOCATIONS OF REMOVED HOT SPOTS AT PARCELS B, D-1, AND G



## Propose Path Forward for Hotspot B3426



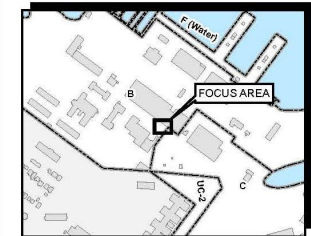
- Lead concentrations in soil decrease with distance from the hotspot sample location, then increase in the direction of Bldg 123
- It is presumed that increasing lead concentrations in shallow soil near Bldg 123 are due to lead-based paint (LBP) contamination; not a CERCLA release
- The Navy proposes to perform a limited investigation to determine if lead in soil near Bldg 123 is related to LBP in soil
- Samples at various depths and distances from the building will be collected and analyzed for lead (away from the hotspot location)
- A sample of the paint on the building will be analyzed for lead
- If contamination is due to LBP, the Navy proposes to consider B3426 delineated and to backfill the excavation
- If contamination is not due to LBP, the Navy will proceed with step out excavation and confirmation sampling in accordance with the work plan



# Proposed LBP Sampling Plan



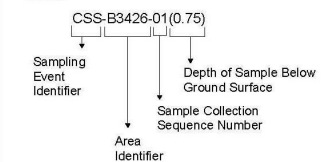
B3426	
Lead PAL = 155mg/kg	
Sample ID	Result (mg/kg)
CSB-B3426-01(2.25)	15.3
CSS-B3426-01(0.75)	23.5
CSS-B3426-02(0.75)	20.7
CSS-B3426-03(0.75)	15.2
CSS-B3426-04(0.75)	232
CSS-B3426-05(0.75)	576
CSS-B3426-06(0.75)	735
CSS-B3426-08(0.75)	357



## Legend

- ⊕ Proposed Sample Locations for Lead-Based Paint in Soil Investigation\*
- Post-Excavation Confirmation Sample Location; Concentration exceeds PAL
- Post-Excavation Confirmation Sample Location; Concentration does not exceed PAL
- Surveyed Extent of Hotspot Excavation
- - - Proposed Hotspot Excavation Boundary
- IR Site Boundary
- 123 Building
- Former Road Boundary

## Notes:



bgs = below ground surface  
 CSB = Confirmation Sample Bottom  
 CSS = Confirmation Sample Sidewall  
 mg/kg = milligrams per kilogram  
 PAL = Project Action Limit

\*Samples to be collected at 0 inches, 6 inches, and 12 inches bgs at each location

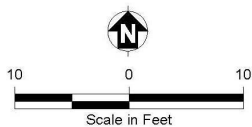
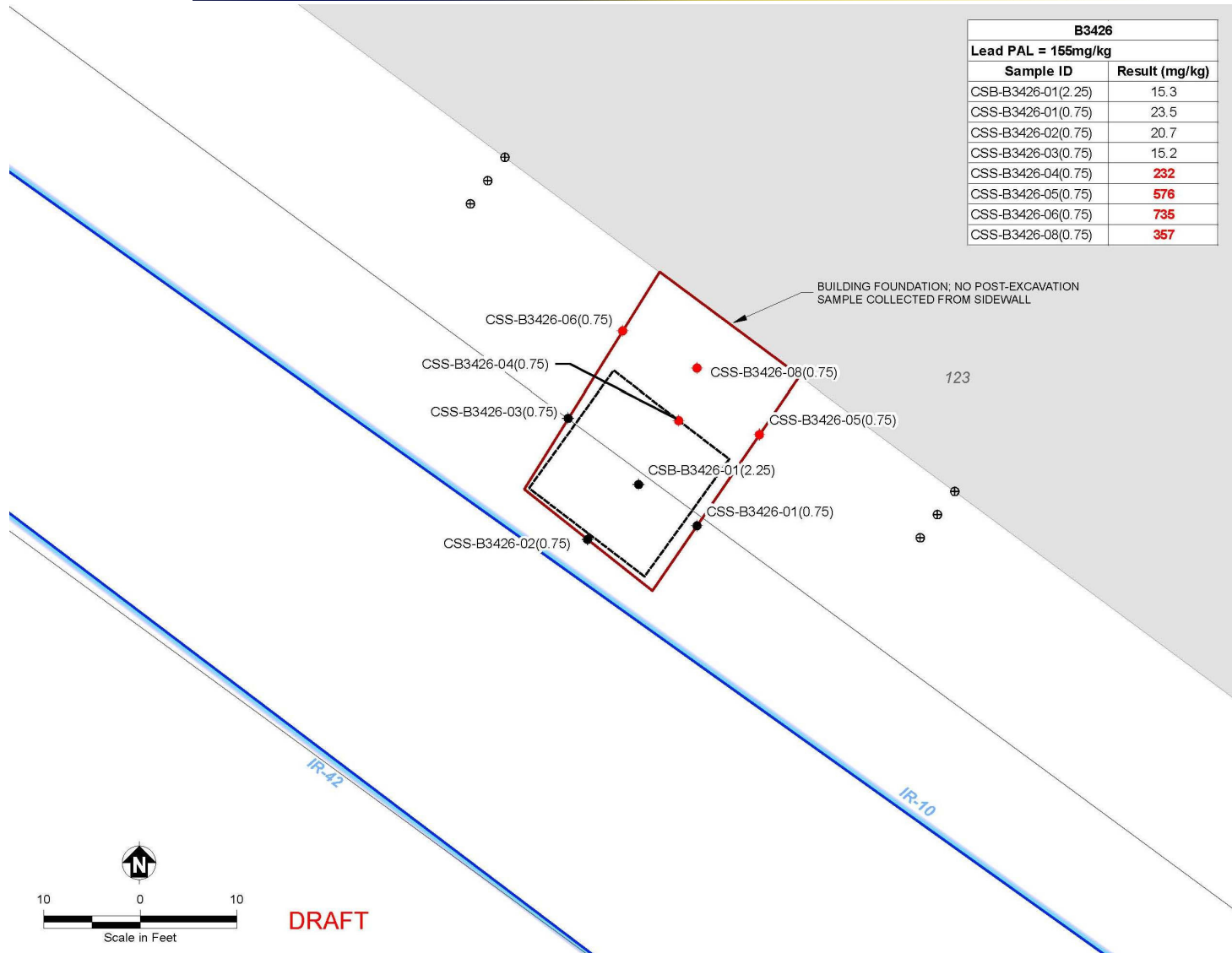
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## FIGURE X

## PROPOSED SAMPLE LOCATIONS FOR LEAD-BASED PAINT IN SOIL INVESTIGATION

Soil Hotspot Excavations at Parcels B, D-1, and G;  
 and Soil Stockpile Removal at Parcels D-1 and G



**DRAFT**





## RA Activities In Progress (cont.)



### Parcels D-1 and G Soil Stockpile Removal

- 15 of 18 stockpiles were removed prior to the start of this RA, leaving 3 requiring removal, characterization, and disposal
- 3 remaining stockpiles were relocated to on-site stockpile area in Parcel B; staged for off-site removal and disposal
- All stockpiles (and soil excavated from soil hotspots and from the shoreline of 7/18) were sampled for disposal profiling
- Soil load-out and disposal is being performed by the base-wide non-radiological disposal contractor
- Soil will be disposed of as:
  - Class II non-hazardous waste (~6,000 tons)
  - CA hazardous waste due to soluble lead (~4,000 tons)





# Soil Stockpile Location Map





# RA Completion Schedule



## IR Sites 07 and 18 RA

- |  |                  |
|--|------------------|
| • Import and Place Soil Cover Material:  | Apr 14 – May 27  |
| • Seeding and Fence Installation:        | May 30 – June 20 |
| • Demobilization:                        | Jun 21 – Jun 27  |
| • CDPH Post-Cover Scan of Sites 07 & 18: | > Jul 1 (TBD)    |
| • Draft RACR and RA Fact Sheet:          | Sept 13          |
| • Final RACR and RA Fact Sheet:          | Nov 16           |



## RA Completion Schedule (cont.)



### Parcels B, D-1, and G Hot Spots and Stockpiles

- |   |           |
|---|-----------|
| • Complete excavation at B3426:               | Feb 10    |
| • Soil stockpile transportation and disposal: | Feb (TBD) |
| • Draft RACR and RA Fact Sheet:               | Mar 29    |
| • Final RACR and RA Fact Sheet:               | Jun 1     |





# Hotspot Locations Delineated by Surveyor





# Drill Rig Used to Collect Pre-Excavation Samples at Hotspot Location







# Excavation of Delineated Hot Spot







# Air Monitoring Station Set Up at Hotspot Location







# Confirmation Sampling at Hotspot Location







## Secured Hotspot Excavation – Awaiting Confirmation Results







# Backfilling Hotspot Excavation







# Hotspot Backfill Compaction Using a Vibratory Plate Compactor







# Nuclear Density Gauge Used to Verify Backfill Compaction Density







# Backfilled Hotspot Excavation

